



Strategic Technology and Innovation Management Programme

Strategic Platforms and their Depiction on Roadmaps

Nida Wonphanlert Rob Phaal rp108@cam.ac.uk 'Platform' thinking often forms a key part of company innovation strategy, enabling product variety while managing complexity, costs and development times. Roadmapping is method that supports strategic innovation, but has not been explicitly linked to platform thinking before, which is the motivation for this project.

Aims

The aim of this project was to clarify and define the meaning of 'strategic platforms' in the industrial context; and then to explore how platform thinking can be appropriately depicted on roadmaps.

Progress

A preliminary framework was developed based on literature review and a industrial workshop, exploring the various industrial interpretations of the platform concept. This was followed by a series 4 interviews and 2 deep case studies to develop the framework, which was tested in a second workshop and series of 4 interviews, covering a wide range of industrial sectors and contexts. Sectors covered in the study included: aerospace, construction, consumer products, defence, electromechanical systems, injection moulding, medical products, mining, printing and technical consulting.

Deliverables

Platforms

Platforms are defined broadly as "A set of common physical or non-physical elements that are reused to develop a variety of products to meet specific business and market needs while keeping costs and development times low".

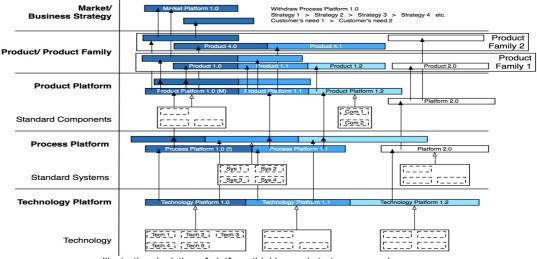
However, in practice the meaning and implementation of platform thinking varies considerably depending on industry and company context. Companies need to think carefully about *which* elements and *how* these are reused within the company. Many different elements might be reused, so it is important to justify *why* certain types are reused and *what* benefits are derived from those elements.

Platforms can exist at various hierarchy levels: technology, process and product platforms can support products, product families and markets.

Roadmapping

The definitions and hierarchical platform perspective described above are compatible with the architectural principles of roadmaps, which provide a natural structure for depicting platform thinking and strategy in firms.

Consideration should be given to platform definition (in the firm context), platform levels, reasons for platform deployment, platform and product architecture in order to define the platform strategy for the business, in the context of market segments and product families.



Illustrative depiction of platform thinking and strategy on roadmap

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